SYSTEM AND METHOD FOR NETWORK TUNNELING UTILIZING MICRO-FLOW STATE INFORMATION

ABSTRACT OF THE DISCLOSURE

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Network tunneling methods and apparatus utilizing flow state information are provided. A router includes an ingress linecard having logic that selects a particular network tunnel for a received micro-flow. The ingress linecard further includes logic that selects a particular egress linecard and a particular port to utilize for transmitting the

10 micro-flow. The router also includes an aggregate flow block that includes tunnel specific information for the selected network tunnel. The tunnel specific information includes but is not limited to label action and outgoing label(s), Layer 2 tunneling action or Layer 3 actions. The aggregate flow block further includes statistics for the selected network tunnel. In addition, the router includes a flow block having flow state

15 information for the micro-flow. The flow block also includes an identifier that associates the flow block with the aggregate flow block.